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## CLAIMS

What Is Claimed:

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1. Relaxin like factor comprising an A chain and a B chain,

5 said A chain having the amino acid sequence:
Gln-Leu-Tyr-Ser-Ala-Leu-Ala-Asn-Lys-Cys-Cys-HisVal-Gly-Cys-Thr-Lys-Arg-Ser-Leu-Ala-Arg-Phe-Cys
or an amino acid sequence truncated by up to about 6
amino acids from the N-terminus and/or by up to 6
10 amino acids from the C-terminus;

said B chain having the amino acid sequence:
Asp-Ser-Trp-Met-Glu-Glu-Val-Ile-Lys-Leu-Cys-Gly-Arg-Glu-Leu-Val-Arg-Ala-Gln-Ile-Ala-Ile-Cys-Gly-Met-Ser-Thr-Trp-Ser

or an amino acid sequence truncated by up to 5 amino acids from the N-terminus and/or by up to 5 amino acids from the C-terminus;

said A and B chains linked by disulfide bonds between All and Bll and wherein said relaxin like factor displaces bound relaxin tracer from the receptor to which it is bound.

- 2. The relaxin like factor of Claim 1 wherein 0 up to about 6 amino acids are deleted from the 5' end and 0 up to about 6 amino acids are deleted from the 3' end of the A-chain.
- 3. The relaxin like factor of Claim 1 wherein 0 up to about 5 amino acids are deleted from the 5' end and 0 up to about 5 amino acids are deleted from the 3' end of the B-chain.
- 4. A method of treating a mammal for a condition susceptible to treatment with relaxin, comprising administering to a mammal in need thereof a therapeutically effective amount of the relaxin like factor of Claim 1.
- 5. The method of Claim 3 wherein the disease is selected from the group comprising cardiovascular

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disease, neurodegenerative or neurologic disease, sinus bradycardia, depression, hair loss, or diseases related to uncontrolled or abnormal collagen or fibronectin formation.

- 6. The method of Claim 5 wherein the disease related to the uncontrolled or abnormal collagen formation is scleroderma.
  - 7. A pharmaceutical composition comprising the relaxin like factor of Claim 1 and a pharmaceutically acceptable excipient.
  - 8. The pharmaceutical composition of Claim 7 additionally comprising relaxin or relaxin analog.
  - 9. The pharmaceutical composition of Claim 8 wherein said relaxin like factor and relaxin are present in synergistic amounts.
  - 10. The relaxin analog of Claim 1 wherein said relaxin like factor is radiolabelled.
  - 11. A method for using the relaxin like factor of Claim 1 in a binding assay.
- 20 12. A method for using the relaxin like factor of composition of Claim 10 for relaxin receptor mapping.
- 13. A pharmaceutical composition of Claim 7 wherein the effective amount is 0.1 to 500  $\mu$ g/kg of body weight per day.

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